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ABSTRACT

Methods, compositions and articles of manufacture for assaying a sample for an
amplification product from a target polynucleotide are provided. An amplification reaction is
used to produce the amplification product from the target polynucleotide so that it can be used to
indirectly assay the sample for the target polynucleotide. A sample suspected of containing the
target polynucleotide is contacted with first and second primers to amplify the target
polynucleotide; the first primer comprises a tag sequence, the complement of which is formed on
the opposite strand during amplification and is referred to as a capture sequence. That opposite
strand is referred to as a second primer extension product or an amplification product, and
comprises a label. A capture probe is provided that is conjugated to a substrate and can bind to
the capture sequence to form an amplification product detection complex. Methods of detecting
the amplification product thus produced are also provided, as are amplification product assay
arrays, along with methods of forming the same. The methods are particularly useful in
multiplex settings where a plurality of target polynucleotides are to be assayed. Kits comprising
reagents for performing such methods are also provided.